

Amended Claims

~~16. (Twice Amended) A method for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising the steps of:
pre-distorting said signal at the transmitter to accentuate the signal magnitude at a known fixed frequency where said nonlinear distortion resides;
communicating the pre-distorted signal to said receiver; and
filtering the pre-distorted signal at said receiver to attenuate the signal magnitude at said known fixed frequency, wherein said pre-distorting of said signal at said transmitter compensates for distortion effects caused by said filtering at said receiver.~~

~~19. (Twice Amended) Apparatus for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising:
a first filter at the transmitter to provide a pre-distorted signal having an accentuated magnitude at a known fixed frequency where said nonlinear distortion resides; and
a second filter at the receiver adapted to filter the pre-distorted signal to attenuate the signal magnitude at said known fixed frequency, wherein said first filter compensates for distortion effects caused by said second filter.~~

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21. (Amended) Apparatus for filtering nonlinear distortion in a signal communicated from a transmitter to a receiver via a communication path, comprising:

a first notch filter at the transmitter having a first transfer function to provide a pre-distorted signal having an accentuated magnitude at a known fixed frequency where said nonlinear distortion resides; and

a second notch filter at the receiver having a second transfer function adapted to filter the pre-distorted signal to attenuate the signal magnitude at said known fixed frequency;

wherein said first transfer function is the inverse of said second transfer function.

Insert the following new claims 22-24:

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--22. (NEW) A method in accordance with claim 16, wherein:
said communication path comprises a downstream communication path in a television distribution system;
said transmitter is located at a television headend;
said receiver is associated with a subscriber terminal.

23. (NEW) An apparatus in accordance with claim 19, wherein:

By ~~said communication path comprises a downstream
communication path in a television distribution system;
said transmitter is located at a television headend;
said receiver is associated with a subscriber
terminal.~~ C

24. (NEW) Apparatus in accordance with claim 21, wherein:
said communication path comprises a downstream
communication path in a television distribution system;
said transmitter is located at a television headend;
said receiver is associated with a subscriber
terminal.--
